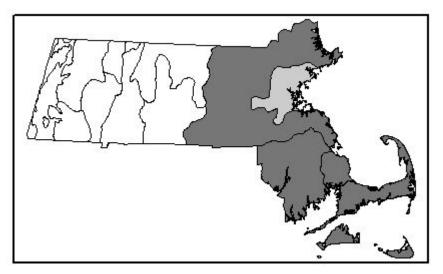
Community Name: ESTUARINE INTERTIDAL: SALINE /BRACKISH FLATS

Community CODE: CE2A100000

SRANK: S3



Concept: Non-organic substrates exposed between tides with sparse vegetation.

Environmental setting: Lower estuarine areas exposed between high tides, covered with brackish or saline water at high

tide. Flats accumulate in areas sufficiently quiet for sediments to accumulate. Species are patchy.

Grades into Brackish Tidal Marsh, mud flat zone, which has more organic sediments.

Vegetation Description: Sparsely vegetated with patches of predominately rosette leaved aquatics such as riverbank

quillwort (*Isoetes riparia*), river arrowhead (*Sagittaria subulata*), saltpond spike-rush (*Eleocharis parvula*), and Atlantic mudwort (*Limosella australis*). Patches of algae and eelgrass (*Zostera marina*) can also occur. The plants are completely submerged at high tide and usually coated with

mud.

Associations:

Habitat Values for Associated Fauna:

Gulls and shorebirds feed on flats at low tide, American Black Duck (*Anas rubripes*), other diving ducks, and other water birds feed on flooded flats. Polychaetes, snails, clams, and amphipods are abundant in mud and sand flats. Essentially the same fauna as on marine intertidal flats.

Associated rare plants:

NONE KNOWN

Associated rare animals:

NONE KNOWN

Examples with Public Access:

Flats in Brewster, Cape Cod Bay; and Joppa Flats, Merrimack River mouth.

Threats:

Management needs:

Natural Heritage & Endangered Species Program, Massachusetts Division of Fisheries & Wildlife

Synonyms
USNVC/TNC: Isoetes riparia tidal sparsely Vegetated Alliance -- Isoetes riparia Tidal Sparse Vegetation

[CEGL006058]; Sagittaria subulata - Limosella australis Tidal Herbaceous Alliance -- Sagittaria subulata - Limosella australis Tidal Herbaceous Vegetation [CEGL004473].

MA (old name): Southern New England/Gulf of Maine Saline/ Brackish Intertidal flat; Southern New England/Gulf

of Maine Fresh/ Brackish Subtidal Estuarine Community.

ME: Intertidal mud flat community Intertidal sand - gravel flat community; Estuarine - Brackish tidal

marsh community, mudflat zone, Intertidal mud flat community; Intertidal sand - gravel flat

community.

NH: Possible, not described.

NY: Marine intertidal mudflats (mostly invertebrates); Estuarine intertidal, Brackish intertidal mudflats.

CT: Sagittaria subulata - Zannichellia palustris community.

RI: Marine intertidal mud flat.

Other:

Author: J. Lundgren **Date:** 6/13/99